DRAFT May 10, 2012

Date

Dr. Jerry Meral, Deputy Secretary
California Natural Resources Agency
1416 9th St, Suite 1311
Sacramento, CA 95814

Dear Dr. Meral:

On behalf of the Central Valley Joint Venture (CVJV) Management Board, I am writing to clarify the habitat needs of migratory birds in the Sacramento-San Joaquin Delta to insure they are considered in Bay Delta Conservation Plan (BDCP), the Delta Plan, and other associated planning efforts in the region. The Central Valley Joint Venture is a partnership of 22 public and private entities comprised of agencies, and conservation and corporate organizations. Our mission is to work collaboratively through diverse partnerships to protect, restore, and enhance wetlands and associated habitats for migratory birds, in accordance with conservation actions identified in the Central Valley Joint Venture 2006 Implementation Plan (Plan). Through these biologically-based actions, CVJV partners work to sustain migratory bird populations in perpetuity for the benefit of those species, their ecosystems, and the public.

California has lost more than 95% of its historic wetlands, largely due to urbanization, flood control and agriculture. As a result, many species have declined from historic levels, and are increasingly dependent on fewer wetlands. Despite these tremendous habitat losses, California arguably remains the most important wintering area for waterfowl and other waterbirds in the Pacific Flyway. Avian species from the north, some as far as Alaska and the Canadian Arctic, rely on our wetlands for nutritional and other needs while visiting during their migration. In addition, many resident bird species nest within or near local wetland habitats.

The importance of wetland habitat in California is widely recognized and "no net loss" policies have been established to promote conservation of existing wetlands and restoration of additional wetland acres. In 2009, the State Legislature passed the Delta Reform Act (SBX7 1) which, among other things, amended the Water Code to insure the Delta Plan included restoring habitat necessary to avoid a net loss of migratory bird habitat and, where feasible, increase migratory bird habitat to promote viable populations of migratory birds (Water Code §85302).

The CVJV has supported these policies, and our 2006 Implementation Plan provides a blueprint for improving habitat by identifying specific goals and objectives for wetland, riparian and agricultural habitat conservation. The CVJV partnership has also promoted and implemented non-traditional management solutions to fulfill the needs of waterbirds by working extensively with private wetland managers and agriculture. This is critical, because there is insufficient wetland habitat in public ownership to support current migratory bird populations. In addition to

conventional restoration and protection, the CVJV also emphasizes active management and enhancement of wetlands and agriculture to maximize the benefits to waterbirds. Few wetlands with natural hydrology remain in the Central Valley due to reclamation and flood control projects. Most wetlands are intensively managed and artificially flooded during the winter as surrogate habitat to replace lost natural wetlands. Seasonal wetlands are flooded in fall to coincide with waterbird migration, and water depth is manipulated to attract target species. Water is drawn down in spring to expose the soil and stimulate growth of beneficial food plants. Prescriptive water control includes subsequent irrigation during the growing season to improve food production and availability for birds the following fall and winter. Enhancing agriculture for waterbirds involves applying water to certain crops to provide additional foraging habitat and energetic needs which cannot be met by the Central Valley's limited natural or managed wetlands.

The CVJV Implementation Plan defines specific habitat goals and objectives for several avian groups deemed of ecological or economic value in the Central Valley. The CVJV goals and objectives are described detail in the Plan, and it is available at our website (http://www.centralvalleyjointventure.org/materials/CVJV_fnl.pdf). In the Plan, habitat conservation objectives for wintering waterfowl were established at the basin scale, and for shorebirds at a broader regional scale. An energetic approach was used for migrating and wintering birds, assuming that food energy supplies are the limiting factor for support of target populations. The CVJV considered nine Basins as the planning unit for habitat conservation objectives. Three of these Basins (Suisun, Delta, and Yolo) are within the BDCP planning area, and the habitat restoration conservation objectives from the CVJV Implementation Plan are summarized below.

Suisun Basin

Wetland protection objectives - There are no wetland protection objectives for this basin, as the entire 58,000-acre marsh (32,232 wetlands) is protected by the Suisun Marsh Protection Act of 1977. As such, protection objectives were deemed unnecessary for the Suisun Basin.

Wetland restoration objectives – There are no wetland restoration objectives, because existing managed wetlands are adequate to support desired waterfowl populations. However, reductions in wetland values as a result of conversion to tidal or other means would require an equal amount restored to managed wetlands to maintain migratory bird values.

Annual enhancement objective for existing wetlands - 2686 acres/year

Wetland water supply objectives- 153,102 acre/feet/year

Yolo Basin

Wetland protection objective - 5000 acres

Wetland restoration objective - 3000 acres, to achieve total basin wetland goal of 11,558 acres

Annual enhancement objective for existing wetlands - 963 acres/year

Agricultural enhancement objective - 11,000 acres (corn and rice)

Riparian habitat - 675 acres
Wetland water supply objective – 57,790 acre/feet/year

Delta Basin
Wetland protection objective - 3000 acres
Wetland restoration objective - 19,000 acres, to achieve total basin wetland goal of 25,349
Annual enhancement objective for existing wetlands - 529 acres/year
Agricultural enhancement objective - 23,000 acres (corn and small grains)
Riparian restoration objective - 2500 acres (Cosumnes and Mokelumne rivers)
Wetland water supply objectives – 120,408 acre/feet/year

Protection includes fee title acquisition or perpetual easement, *restoration* includes physical manipulation of a former wetland to mimic natural function, and *enhancement* includes physical (or infrastructure) changes to existing wetlands to improve function or manipulate vegetative successional stage. *Agricultural enhancement* includes activities which improve access to waterbirds, such as flooding. In addition to the above habitat objectives, which emphasize wintering waterfowl, there are also seasonal habitat objectives (such as semi-permanent wetlands, early fall/late spring wetlands) for breeding waterfowl, shorebirds, and other waterbirds. .

CVJV partners have made considerable progress towards our restoration and protection goals in the Delta region, largely due to conservation efforts in the Yolo Basin (e.g., expansion of the Yolo Bypass Wildlife Area). However, we have not met our wetland goals in the Delta Basin, and funding and permit restrictions have limited our enhancement efforts in the Suisun Basin. Agricultural habitat enhancement goals have been exceeded in the Sacramento Valley north of the Delta, largely due to restrictions on burning and resulting flooding of rice to encourage straw decomposition. Nevertheless, the habitat in the Delta region, while considered degraded for native fish, has actually become considerably more hospitable to avian species as a result of CVJV activities.

The habitat conservation objectives outlined in the CVJV Implementation Plan were developed based on conditions almost 10 years ago. The physical, economic and political landscapes have changed considerably in the Central Valley since then, and a reevaluation of migratory bird needs in light of these changes is paramount to improve conservation planning and delivery. This is especially true in the Delta region, where the 2009 water legislation could have an immediate and lasting impact.

Foremost is the potential impact of restoring 65,000 acres of tidal marsh, 10,000 acres of flood plain, and the "enhancement" of the flood plains in the Yolo Bypass area, as proposed in the BDCP. We strongly support additional wetland restoration in the Delta. However, as a general

principal, we caution planners to fully recognize and protect the existing ecological values of the region. We believe that there is potential to undo much of the good work we have painstakingly and at great public and private expense accomplished to date unless this new work is done in a manner sensitive to needs of the entire ecosystem. The potential for restoring ecological conditions favorable for native fish species is great, but should be additive to, rather than at the expense of, existing avian and other terrestrial values. It is important that the BDCP consider the goals and objectives of the CVJV Plan. The BDCP could impact, either positively or negatively, both past accomplishments and future progress towards CVJV Plan goals. We believe the CVJV goals should be a critical element of Delta ecosystem restoration goals.

In the Suisun Marsh, for example, over 14,000 acres of seasonal wetlands are proposed to be restored to tidal wetlands as a result of the BDCP. While this may not be considered a loss of wetland area, it will undoubtedly result in a loss of wetland functions and values. Potential impacts include direct loss of foraging habitat, and indirect loss of foraging and breeding habitat if salinities in channels or wetlands increase greater than predicted. This represents over 40% of the managed wetland habitat in the Suisun Marsh, and losing it will reduce the amount of food available to waterfowl and other waterbirds that winter there. Wetlands which have been converted to tidal action cannot be actively managed for preferred plants and provide far less food for waterfowl. Studies to provide baseline data needed to quantify these impacts have not been conducted, and are urgently needed if adaptive management is possible. The CVJV Implementation Plan evaluated the impacts of converting 5000 acres of managed wetlands to tidal wetlands in the Suisun Marsh and determined such actions could result in the depletion of food supplies for desired waterfowl populations by early February. Currently, managed wetlands are thought to provide sufficient food supplies for the entire winter. Recently, planners determined that losing 5000-7000 acres of managed wetland in the Suisun Marsh will not significantly impact migratory birds and does not require mitigation (Suisun Marsh Habitat Management, Preservation, and Restoration Plan Final EIS/EIR 2011). We disagree with that conclusion and the methods used during the assessment, and encourage a more objective and science-based approach for the BDCP.

It is possible that improving management on existing managed wetlands can partially compensate for lost benefits if a portion are converted to tidal, but this conclusion is largely speculative because there are little data in support. Without knowing what wetlands provide in their existing conditions, and under what management scenarios, it is impossible to predict if annual incremental increases are possible through improved management. In general, brackish managed wetlands are considered to provide less food value than their freshwater counterparts, and the opportunity to increase their productivity may also be less inland wetlands due to constraints of an estuarine environment and unpredictability of water quality each year.

Altering the Yolo Bypass has also been emphasized as fish habitat as part of BDCP, potentially compromising the wetland restoration efforts of arguably one of the most successful wetland

restoration projects in the state (Yolo Bypass Wildlife Area). We understand that fish need flood plains, the Yolo Bypass provides surrogate shallow water habitat that was lost when rivers were channelized and Delta islands were isolated behind levees. The proposed action to lower the Fremont Weir to allow Sacramento River water to flood the bypass more frequently could be detrimental to many migratory birds. Flooding depths required for fish can be too deep to benefit even large dabbling ducks like mallards and pintail, which prefer to forage in habitats less than a foot deep. This would make food produced in managed wetlands of the Yolo Wildlife Area, private duck clubs, as well as thousands of acres of rice, unavailable to feeding waterfowl and other birds. The Bypass could also be flooded well into the spring under this strategy, interfering with wetland management activities and making rice farming difficult or less profitable. This action could compromise the waterbird habitat values of the bypass, which was the intended purpose of millions of dollars in public and private funding already invested to restore its wetlands. It is critical that the proposed actions in the Yolo Bypass under BDCP be evaluated in regards to potential impacts on migratory bird habitat.

A portion of the tidal and floodplain restoration proposed in the BDCP involves conversion of agriculture throughout the Delta region. Because of the dramatic loss of natural wetlands in the Central Valley, many bird species are dependent on the habitat provided by agriculture. Waterfowl, sandhill cranes, and many other birds rely on dry or flooded waste grains such as corn, wheat, and rice to meet a portion of their nutritional needs. In fact, the wetland habitat goals and objectives established in the CVJV Implementation Plan assume that roughly 50% of the nutritional needs of waterfowl are provided by agriculture. Wildlife-friendly crops in the Delta and throughout the Central Valley are being replaced by crops of limited value to wildlife (such as orchards and vineyards) at an alarming rate. If wildlife values of agriculture are not sustainable because of conversion to other crops, tidal wetlands, or other stressors, then wetland habitat goals in the CVJV Implementation Plan will need to be increased to reflect the new reality. Tidal wetlands could benefit many wildlife species, including waterbirds, but we hope this does not occur at the expense of existing migratory bird habitat values in the Delta.

More difficult to quantify, because the impacts are indirect and uncertainties many, are the implications of BDCP to waterbird habitat outside of the legal Delta and Suisun Marsh. Improved water conveyance (resulting from proposed actions), may simplify and perhaps increase transfers of water south of the Delta, potentially reducing the amount of rice farmed in the Sacramento Valley. This would directly impact foraging habitat for wintering (and breeding) waterfowl and shorebirds. In addition, some private and public wetlands rely on rice tailwater to flood habitat in the fall, so reductions in rice acreage farmed would also indirectly impact the availability (or cost of operating) managed wetlands. Widespread reductions in rice farming or ricefield flooding as a result of reduced water use (from either transfer or increased instream flow requirements) would require the CVJV to reevaluate our reliance on agriculture during conservation planning (i.e., our 50% assumption), and increase efforts and secure funding to restore additional wetland habitat.

I bring these examples and potential scenarios to your attention because, if not carefully thought out or mitigated for, could result in a serious "net loss" of migratory bird habitat. A comprehensive and scientifically credible effects analysis is critical for quantifying direct impacts to migratory bird habitat in the Delta/Suisun region, and to identify safeguards to minimize impacts in in other parts of the Central Valley.

The CVJV partners have made considerable progress, and at considerable public and private expense, towards habitat conservation in the Delta and Suisun Marsh. As a result, conditions there are better today for migratory birds than they were 20 years ago. However, the CVJV has not fulfilled all of our wetland habitat goals in the Delta, and our partners continue to look for opportunities there. The BDCP has the potential to improve, or degrade, wetland and agriculture habitats important to birds and other terrestrial wildlife. It is critical that conservation actions proposed as part of BDCP be thoroughly evaluated in regards to impacts (positive and negative) on migratory birds, consistent with the intent of the Delta Reform Act. Our partner organizations have staff with considerable scientific expertise in avian and wetland ecology, and who are willing to provide input during the development of the BDCP and the evaluation of its effects. We look forward to engaging with the Resources Agency and other involved in Delta and Suisun planning to insure that ecosystem restoration includes all important habitat types and considers important terrestrial species such as migratory birds.

Sincerely,

CVJV